

Advancement Handbook for Aviation Boatswain's Mate, Aircraft Handling

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PREFACE

The purpose of the Advancement Handbook is to help you focus your preparation for Navywide advancement-in-rating examinations. The bibliographies (BIBs) together with this handbook form a comprehensive examination study package. Since this handbook provides skill and knowledge components for each paygrade of the Aviation Boatswain's Mate, Aircraft Handling (ABH) rating, it helps you concentrate your study on those areas that may be tested. This feature will help you get the most out of your study time.

Each page in Parts 1 through 4 of this Advancement Handbook presents general skill areas, specific skill areas, the knowledge factors associated with each skill area, the pertinent references that address each skill, and the subject areas that may be covered on the examination. The skill statements describe the skills you are expected to perform for each paygrade. The skill statements are cumulative; that is, you are responsible for the skills for the paygrade you are competing for, your present paygrade, and all paygrades below.

Although this handbook is very comprehensive, it cannot cover all the tasks performed in the rating. As a result, the advancement examinations may contain questions more detailed than described in the “*Exam Expectations*” section of the skill areas.

Remember that advancement competition is keen, so your keys to advancement include not only comprehensive advancement examination study but also sustained superior performance.

Prepared by
Navy Advancement Center Department,
Naval Education and Training Professional
Development and Technology Center

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Part 1

Advancement Handbook for ABH3

Advancement Handbook for ABH3

General ABH <i>Skill Area</i>	Shipboard and Shore Station Aircraft Handling
A <i>skill</i> you are expected to perform from the General Skill Area above:	Install and remove naval wheel chocks
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Selection of proper wheel chock • Identification of safety hazards • Wheel chock placement procedures • Interpretation of visual and audio signals
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • LHA/LPH/LHD NATOPS Manual, Chapters 4, 5, and 6 (NAVAIR 00-80T-106) • CV NATOPS Manual, Chapters 4, 5, and 6 (NAVAIR 00-80T-105) • Aircraft Signals NATOPS Manual, Chapters 2 and 3 (NAVAIR 00-80T-113) • NATOPS U.S. Navy Aircraft Firefighting and Rescue Manual, Appendix D (NAVAIR 00-80R-14) • NATOPS U.S. Navy Aircraft Crash & Salvage Operations Manual (Afloat), Chapters 4 and 5 (NAVAIR 00-80R-19) • NATOPS U.S. Navy Aircraft Crash & Salvage Operations Manual (Ashore), Chapters 4 and 8 (NAVAIR 00-80R-20) • U.S. Navy Support Equipment Common Basic Handling & Safety Manual, Work Package 005 (NAVAIR 00-80T-96) • Aircraft Securing and Handling Procedures for Aircraft Restraining Devices and Related Components, Work Packages 003, 004, 005, and 007 (NAVAIR 17-1-537) • Aviation Boatswain's Mate H 3 & 2, Chapters 2, 3, and 4 (NAVEDTRA 12368)

	<ul style="list-style-type: none"> • Air Department Standard Operating Procedures (SOP), Chapters 4 and 7 (COMNAVAIRPAC/AIRLANTINST 3100.4)
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about installing and removing wheel chocks to include both shore base and shipboard applications, various types of wheel chocks, associated safety hazards, and audio and visual signals. The questions may be of a general nature or situation specific.</p>

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General ABH <i>Skill Area</i>	Shipboard and Shore Station Aircraft Handling
A <i>skill</i> you are expected to perform from the General Skill Area above:	Install and remove aircraft tow bars
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Selection of proper tow bar • Identification of safety hazards • Tow bar components • Tow bar characteristics
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • NATOPS U.S. Navy Aircraft Crash & Salvage Operations Manual (Afloat), Chapter 4 (NAVAIR 00-80R-19) • NATOPS U.S. Navy Aircraft Crash & Salvage Operations Manual (Ashore), Chapter 4 and Appendices • C through HH (NAVAIR 00-80R-20) • U.S. Navy Support Equipment Common Basic Handling & Safety Manual, Work Packages 005 (NAVAIR 00-80T-96) • Aircraft Securing and Handling Procedures for Aircraft Restraining Devices and Related Components, Work Package 006, 007, 008, and 009 (NAVAIR 17-1-537) • Aviation Boatswain's Mate H 3 & 2, Chapter 2 (NAVEDTRA 12368) • Air Department Standard Operating Procedures (SOP), Chapter 4 (COMNAVAIRPAC/AIRLANTINST 3100.4)

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about installing and removing tow bars to include shipboard and shore station applications, physical descriptions and characteristics, and associated safety hazards. The questions may be of a general nature or situation specific.</p>
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General ABH <i>Skill Area</i>	Shipboard and Shore Station Aircraft Handling
A <i>skill</i> you are expected to perform from the General Skill Area above:	Install and remove aircraft tiedown chains
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Tiedown requirements • Securing points on Naval aircraft • Associated safety hazards • Tiedown chain components • Tiedown chain characteristics • Interpretation of audio and visual signals
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • LHA/LPH/LHD NATOPS Manual, Chapters 4, 5, and 6 (NAVAIR 00-80T-106) • CV NATOPS Manual, Chapters 4 and 5 (NAVAIR 00-80T-105) • Aircraft Signals NATOPS Manual, Chapters 2 and 3 (NAVAIR 00-80T-113) • U.S. Navy Support Equipment Common Basic Handling & Safety Manual, Work Package 004 and 005 (NAVAIR 00-80T-96) • Aircraft Securing and Handling Procedures for Aircraft Restraining Devices and Related Components, Work Packages 003 and 004 (NAVAIR 17-1-537) • Helicopter Operating Procedures for Air Capable Ships, Chapter 4 (NWP 3-04.1) • Aviation Boatswain's Mate H 3 & 2, Chapter 2 (NAVEDTRA 12368) • Air Department Standard Operating Procedures (SOP), Chapters 4 and 7 (COMNAVAIRPAC/AIRLANTINST 3100.4)

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about installing and removing tiedown chains on shipboard and shore station aircraft, physical characteristics of tiedown chains, tiedown condition requirements, associated safety hazards, and audio and visual signals. The questions may be of a general nature or situation specific.</p>
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General ABH <i>Skill Area</i>	Shipboard and Shore Station Aircraft Handling
A <i>skill</i> you are expected to perform from the General Skill Area above:	Conduct flight quarters pre-operational checks
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Pre-operational checks on support equipment • Pre-operational checks on flight quarters clothing • Pre-operational checks of fire fighting equipment • Pre-operational checks on communication equipment • Foreign Object Damage (FOD) Walkdown • Completion of Flight Quarters Checklist
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • LHA/LPH/LHD NATOPS Manual, Chapters 2 and 4 (NAVAIR 00-80T-106) • CV NATOPS Manual, Chapter 2 (NAVAIR 00-80T-105) • NATOPS U.S. Navy Aircraft Firefighting and Rescue Manual, Chapters 7, 8, and 9 (NAVAIR 00-80R-14) • U.S. Navy Support Equipment Common Basic Handling & Safety Manual, Work Package 003, 005, and 006 (NAVAIR 00-80T-96) • Aircraft Securing and Handling Procedures for Aircraft Restraining Devices and Related Components, Work Packages 003, 006, and 012 (NAVAIR 17-1-537) • Aviation Boatswain's Mate H 3 & 2, Chapter 2 (NAVEDTRA 12368) • Air Department Standard Operating Procedures (SOP), Chapters 2 and 15 (COMNAVAIRPAC/AIRLANTINST 3100.4)

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions pertaining to flight quarters preparation to include equipment requirements, inspection intervals, and department organization. The questions may be general in nature or situation specific.</p>
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General ABH <i>Skill Area</i>	Shipboard and Shore Station Aircraft Handling
A <i>skill</i> you are expected to perform from the General Skill Area above:	Operate aircraft elevators
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Interpreting audio and visual signals • Establishing communication between watch stations • Control components • Enforcing safety procedures • Estimating gross weight
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • LHA/LPH/LHD NATOPS Manual, Chapters 2 and 6 (NAVAIR 00-80T-106) • CV NATOPS Manual, Chapters 2 and 6 (NAVAIR 00-80T-105) • Aircraft Signals NATOPS Manual, Chapters 2 and 3 (NAVAIR 00-80T-113) • Aviation Boatswain's Mate H 3 & 2, Chapter 2 (NAVEDTRA 12368) • Air Department Standard Operating Procedures (SOP), Chapters 4 and 7 (COMNAVAIRPAC/AIRLANTINST 3100.4) • Shipboard Aviation Facilities Resume, Appendix D (NAEC –ENG-7576)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions on elevator operations to include communication, safety procedures, inport and at-sea procedures, control panel features, and aircraft and support equipment gross weights. The questions may be general in nature or situation specific.

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General ABH <i>Skill Area</i>	Shipboard and Shore Station Aircraft Handling
A <i>skill</i> you are expected to perform from the General Skill Area above:	Direct the movement of aircraft
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Assembling a handling crew • Conducting handling crew safety checks • Conducting handling equipment safety checks • Conducting aircraft safety checks • Checking aircraft brake pressure • Checking obstructions along travel path • Checking deck conditions along travel path • Interpreting audio and visual signals • Interpreting flight deck, hangar deck and airfield markings • Determining safe turning radius of aircraft • Determining safe travel speeds of aircraft • Determining safe parking spots for aircraft
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • LHA/LPH/LHD NATOPS Manual, Chapters 1, 2, 4, 5, 6, and Appendices E and G (NAVAIR 00-80T-106) • CV NATOPS Manual, Chapters 1, 2, 4, 5, 6, and Appendix C (NAVAIR 00-80T-105) • Aircraft Signals NATOPS Manual, Chapters 2 and 3 (NAVAIR 00-80T-113) • U.S. Navy Support Equipment Common Basic Handling & Safety Manual, Work Package 005 (NAVAIR 00-80T-96) • Aircraft Securing and Handling Procedures for Aircraft Restraining Devices and Related Components, Work Packages 003, 004, 005, 006, 007, 008, 009, and 010 (NAVAIR 17-1-537)

	<ul style="list-style-type: none"> • Visual Landing Aids General Service Bulletin NO. 8, Revision K, Paragraph 12 (NAVAIRWARCENACDIVLKE-IS33) • Helicopter Operating Procedures for Air Capable Ships, Chapters 2, 4, 7, and Appendices C and D (NWP 3-04.1) • Aviation Boatswain's Mate H 3 & 2, Chapter 2, 3, and 4 (NAVEDTRA 12368) • Air Department Standard Operating Procedures (SOP), Chapters 1, 2, 3, 4, 5, 6, 7, and 14 (COMNAVAIRPAC/AIRLANTINST 3100.4) • Shipboard Aviation Facilities Resume, Appendix D (NAEC-ENG-7576)
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions on aircraft directing to include handling crew organization and responsibilities, standard signals, safety requirements, aircraft characteristics, and handling procedures. The questions may be general in nature or situation specific.</p>

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General ABH <i>Skill Area</i>	Shipboard and Shore Station Aircraft Handling
A <i>skill</i> you are expected to perform from the General Skill Area above:	Direct helicopters as a Landing Signal Enlisted (LSE)
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Assembling a handling crew • Conducting a handling crew safety brief • Interpreting audio and visual signals • Interpreting flight deck VLA markings • Aircraft start and shutdown procedures • Arming and de-arming procedures • Aircraft launch and recovery procedures
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • LHA/LPH/LHD NATOPS Manual, Chapters 1, 2, 4, 5, 6, and Appendices E and G (NAVAIR 00-80T-106) • CV NATOPS Manual, Chapters 3, 4, 5, and 6 (NAVAIR 00-80T-105) • Aircraft Signals NATOPS Manual, Chapters 2 and 3 (NAVAIR 00-80T-113) • NATOPS U.S. Navy Aircraft Firefighting and Rescue Manual, Chapters 8 and 9 (NAVAIR 00-80R-14) • Aircraft Securing and Handling Procedures for Aircraft Restraining Devices and Related Components, Work Packages 004 and 010 (NAVAIR 17-1-537) • Visual Landing Aids General Service Bulletin NO. 8, Revision K, Paragraph 12 (NAVAIRWARCENACDIVLKE-IS33) • Helicopter Operating Procedures for Air Capable Ships, Chapters 4 and 7 (NWP 3-04.1) • Aviation Boatswain's Mate H 3 & 2, Chapter 4 (NAVEDTRA 12368)

	<ul style="list-style-type: none"> • Air Department Standard Operating Procedures (SOP), Chapter 10 (COMNAVAIRPAC/AIRLANTINST 3100.4)
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions about duties as an LSE to include organization, safety procedures, VLA markings, signaling equipment and procedures, engine starts and shutdown, arming and de-arming, and launching and recovering aircraft. The questions may be general in nature or situation specific.</p>

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General ABH <i>Skill Area</i>	Shipboard and Shore Station Aircraft Handling
A <i>skill</i> you are expected to perform from the General Skill Area above:	Perform aircraft starts and shut-downs
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Starting unit placement for Naval aircraft • Compressed air ratio requirements for Naval aircraft • Safety requirements for aircraft maintenance turns on flight and hangar decks • Interpretation of audio and visual signals • Organization of handling crew • Aircraft characteristics • Maintenance crew responsibilities
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • LHA/LPH/LHD NATOPS Manual, Chapters 2, 4, 5, and 6 (NAVAIR 00-80T-106) • CV NATOPS Manual, Chapters 3, 4, 5, and 6 (NAVAIR 00-80T-105) • Aircraft Signals NATOPS Manual, Chapters 2, 3, and 4 (NAVAIR 00-80T-113) • NATOPS U.S. Navy Aircraft Firefighting and Rescue Manual, Chapters 7 and 8 (NAVAIR 00-80R-14) • NATOPS U.S. Navy Aircraft Emergency Rescue Information Manual, Chapters 2 and 3 and Appendices A through F (NAVAIR 00-80R-14-1) • U.S. Navy Support Equipment Common Basic Handling & Safety Manual, Work Package 012 (NAVAIR 00-80T-96) • Aircraft Securing and Handling Procedures for Aircraft Restraining Devices and Related Components, Work Packages 008, 009, and 010 (NAVAIR 17-1-537)

	<ul style="list-style-type: none"> • Helicopter Operating Procedures for Air Capable Ships, Chapters 9 and 10 and Appendices B and C (NWP 3-04.1) • Aviation Boatswain's Mate H 3 & 2, Chapters 2, 3, and 4 (NAVEDTRA 12368) • Air Department Standard Operating Procedures (SOP), Chapter 4 and Appendix A (COMNAVAIRPAC/AIRLANTINST 3100.4)
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions on performing aircraft starts and shut-downs to include safety procedures, maintenance and operational procedures, auxiliary power units, aircraft security, support equipment requirements, organization, and communication. The questions may be general in nature or situation specific.</p>

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General ABH <i>Skill Area</i>	Aircraft Firefighting and Crash & Salvage
<i>A skill</i> you are expected to perform from the General Skill Area above:	Perform as a hose team member
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Firefighting equipment • Firefighting equipment capabilities • Interpreting hose handling commands • Positioning of hose team members • Moving as a hose team • Operating an oxygen breathing apparatus • Donning protective clothing
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • NATOPS U.S. Navy Aircraft Firefighting and Rescue Manual, Chapters 2, 3, 4, 7, and 8 (NAVAIR 00-80R-14) • Naval Ships' Technical Manual, Chapter 555 – Volume 1 Surface Ship Firefighting, Sections 1, 2, 4, and 7 (S9086-S3-STM-010/CH-555) • Aviation Boatswain's Mate H 3 & 2, Chapters 5, 6, and 7 (NAVEDTRA 12368) • Air Department Standard Operating Procedures (SOP), Chapter 9 (COMNAVAIRPAC/AIRLANTINST 3100.4)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions on duties as a hose team member to include manning procedures and requirements, equipment characteristics and capabilities, organization, hose handling, and personal protective measures. The questions may be general in nature or situation specific.

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General ABH <i>Skill Area</i>	Aircraft Firefighting and Crash & Salvage
<i>A skill</i> you are expected to perform from the General Skill Area above:	Perform as an AFFF station operator
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Identification of equipment • Equipment capabilities • Interpretation of audio and visual commands • Aircraft firefighting organization • Activation and de-activation procedures • Communication procedures • Emergency procedures • Personal protection procedures
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • NATOPS U.S. Navy Aircraft Firefighting and Rescue Manual, Chapters 7, 8, and 9 (NAVAIR 00-80R-14) • Naval Ships' Technical Manual, Chapter 555 – Volume 1 Surface Ship Firefighting, Section 2 (S9086-S3-STM-010/CH-555) • Aviation Boatswain's Mate H 3 & 2, Chapters 5, 6, and 7 (NAVEDTRA 12368) • Air Department Standard Operating Procedures (SOP), Chapter 9 (COMNAVAIRPAC/AIRLANTINST 3100.4)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions on duties as an AFFF station operator to include manning requirements, plug operations, equipment characteristics and capabilities, organization, personal protective measures, and communication. The questions may be general in nature or situation specific.

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General ABH <i>Skill Area</i>	Aircraft Firefighting and Crash & Salvage
<i>A skill</i> you are expected to perform from the General Skill Area above:	Perform as a hose team leader
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Interpreting audio and visual signals • Commanding, controlling, and directing a hose team • Organizing firefighting procedures • Providing direction for ordnance cooling • Providing direction to the plugman • Creating a rescue path • Enforcing safety procedures
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • NATOPS U.S. Navy Aircraft Firefighting and Rescue Manual, Chapters 3 through 9 (NAVAIR 00-80R-14) • Naval Ships' Technical Manual, Chapter 555 – Volume 1 Surface Ship Firefighting, Sections 1, 2, 3, and 4 (S9086-S3-STM-010/CH-555) • Aviation Boatswain's Mate H 3 & 2, Chapters 5, 6, and 7 (NAVEDTRA 12368) • Air Department Standard Operating Procedures (SOP), Chapter 9 (COMNAVAIRPAC/AIRLANTINST 3100.4)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions on performing as a hose team leader to include communication, organization, firefighting, team member responsibilities, ordnance cooling, equipment operation, and safety. The questions may be general in nature or situation specific.

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General ABH <i>Skill Area</i>	Aircraft Firefighting and Crash & Salvage
A <i>skill</i> you are expected to perform from the General Skill Area above:	Initiate hangar deck sprinkler systems
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • AFFF system capabilities • CONFLAG station capabilities and operation • Communication equipment • Reporting procedures • Evaluation of emergency situations • Identification of ordnance • Interpretation of hangar deck VLA
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • NATOPS U.S. Navy Aircraft Firefighting and Rescue Manual, Chapters 7 and 8 (NAVAIR 00-80R-14) • Naval Ships' Technical Manual, Chapter 555 - Volume 1 Surface Ship Firefighting, Section 2 (S9086-S3-STM-010/CH-555) • Visual Landing Aids General Service Bulletin NO. 8, Revision K, Paragraph 2 (NAVAIRWARCENACDIVLKE –IS33) • Aviation Boatswain's Mate H 3 & 2, Chapters 5 and 6 (NAVEDTRA 12368) • Air Department Standard Operating Procedures (SOP), Chapters 9 and 11 (COMNAVAIRPAC/AIRLANTINST 3100.4)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions on activating the hangar deck sprinkling system to include the CONFLAG operation AFFF system, communication, equipment, organization, reports, VLA, and emergency procedures. The questions may be general in nature or situation specific.

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General ABH <i>Skill Area</i>	Aircraft Firefighting and Crash & Salvage
A <i>skill</i> you are expected to perform from the General Skill Area above:	Install and remove barricade ramps
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Audio and visual signals • Installation and removal procedures • Safety procedures • Flight deck organization
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aviation Boatswain's Mate H 3 & 2, Chapter 3 (NAVEDTRA 12368) • Air Department Standard Operating Procedures (SOP), Chapter 6 (COMNAVAIRPAC/AIRLANTINST 3100.4)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions on rigging and de-rigging the barricade to include deck ramps, safety, and organization. The questions may be general in nature or situation specific.

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General ABH <i>Skill Area</i>	Aircraft Firefighting and Crash & Salvage
<i>A skill</i> you are expected to perform from the General Skill Area above:	Perform as a crash and salvage crewman
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Executing rescue procedures • Firefighting organization • Aircraft egress locations • Naval aircraft ejection seats • Conducting emergency shutdown procedures for Naval aircraft • Conducting hoisting procedures • Operating salvage equipment • Capabilities of salvage equipment • Inspecting the crash tool roll • Personal protective equipment • Rigging block and tackle configurations • Computing safe working load strengths • Enforcing safety procedures • Interpreting audio and visual signals • Hazardous material handling procedures • Installing aircraft downlocks
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • NATOPS U.S. Navy Aircraft Firefighting and Rescue Manual, Chapters 2, 3, 4, 7, 8, and 9 (NAVAIR 00-80R-14) • NATOPS U.S. Navy Aircraft Emergency Rescue Information Manual, Chapters 2 and 3 and Appendices A, B, C and F (NAVAIR 00-80R-14-1) • NATOPS U.S. Navy Aircraft Crash & Salvage Operations Manual (Afloat), Chapters 2 through 6 (NAVAIR 00-80R-19) • U.S. Navy Support Equipment Common Basic Handling & Safety Manual, Work Packages 006 and 016 (NAVAIR 00-80T-96)

	<ul style="list-style-type: none"> • Naval Ships' Technical Manual, Chapter 613 Wire and Fiber Rope and Rigging, Sections 1 and 2 (S9086-UU-STM-010/CH-613) • Aviation Boatswain's Mate H 3 & 2, Chapters 1, 5, 6, and 7 (NAVEDTRA 12368) • Use and Care of Hand Tools and Measuring Tools, Chapters 17, 21, 22, 25, and 32 (NAVEDTRA 12085) • Air Department Standard Operating Procedures (SOP), Chapter 9 (COMNAVAIRPAC/AIRLANTINST 3100.4) • Aircraft Crash Handling and Salvage Crane A/S 32A-36, Work Packages 003, 004, and 005 (AG-310DO-OMM-000)
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions on performing as a crash and salvage crewman to include firefighting and rescue organization, aircraft familiarization, hoisting evolutions and hand signals, operation and capabilities of salvage equipment, tool roll, block and tackle, personal protective requirements, and safety precautions. The questions may be general in nature or situation specific.</p>

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General ABH <i>Skill Area</i>	Aircraft Firefighting and Crash & Salvage
<i>A skill</i> you are expected to perform from the General Skill Area above:	Attach and remove hoisting cables and fittings
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Interpreting audio and visual signals • Interpreting Crash Crew Identification Diagrams (CCID's) • Aircraft hoisting procedures for shipboard aircraft • Identifying and operating hand tools • Enforcing safety procedures
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aircraft Signals NATOPS Manual, Chapters 2, 3, and 4 (NAVAIR 00-80T-113) • NATOPS U.S. Navy Aircraft Crash & Salvage Operations Manual (Afloat), Chapters 2 through 6 and Appendices E, F, G, H, J, K, L, O, P, U, and W (NAVAIR 00-80R-19) • Naval Ships' Technical Manual, Chapter 613 Wire and Fiber Rope and Rigging, Sections 1 and 2 (S9086-UU-STM-010/CH-613) • Aviation Boatswain's Mate H 3 & 2, Chapters 1 and 7 (NAVEDTRA 12368) • Use and Care of Hand Tools and Measuring Tools, Chapters 17, 21, 22, and 25 (NAVEDTRA 12085) • Air Department Standard Operating Procedures (SOP), Chapters 4 and 9 (COMNAVAIRPAC/AIRLANTINST 3100.4)

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions on hoisting cables and fittings to include standard crane signals, CCID's, aircraft characteristics, equipment characteristics and capabilities, and safety procedures. The questions may be general in nature or situation specific.</p>
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General ABH <i>Skill Area</i>	Shore Based Emergency Arresting Gear Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Attach crossdeck pendants on arresting gear
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Safety precautions • Equipment nomenclature • Operating procedures • Maintenance procedures • Equipment drawings
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • E-28 Emergency Runway Arresting Gear, Sections 1, 2, 5, and 8 (NAVAIR 51-5-31) • Naval Ships' Technical Manual, Chapter 613 Wire and Fiber Rope and Rigging, Section 1 (S9086-UU-STM-010/CH-613) • Aviation Boatswain's Mate H 3 & 2, Chapter 9 (NAVEDTRA 12368)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions on installing crossdeck pendants on runway emergency arresting gear systems to include personal and equipment safety, operations, and maintenance. The questions may be general in nature or situation specific.

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General ABH <i>Skill Area</i>	Shore Based Emergency Arresting Gear Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Inspect crossdeck pendants on the E-28 arresting gear
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Safety precautions • Equipment nomenclature • Equipment specifications • Operating procedures • Maintenance procedures • Audio and visual signals
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aircraft Signals NATOPS Manual, Chapter 8 (NAVAIR 00-80T-113) • E-28 Emergency Runway Arresting Gear, Sections 1, 2, 5, and 8 (NAVAIR 51-5-31) • Naval Ships' Technical Manual, Chapter 613 Wire and Fiber Rope and Rigging, Section 1 (S9086-UU-STM-010/CH-613) • Aviation Boatswain's Mate H 3 & 2, Chapter 9 (NAVEDTRA 12368)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions on crossdeck pendant inspection of the E-28 arresting gear system to include personal and equipment safety, equipment components and capabilities, runway hand signals, operations, and maintenance. The questions may be general in nature or situation specific.

Advancement Handbook for ABH3

General ABH <i>Skill Area</i>	Shore Based Emergency Arresting Gear Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Install wire supports on crossdeck pendants
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Safety precautions • Tools and procedures • Maintenance procedures • Wire support methods • Wire support spacing requirements • Interpretation of airfield arresting gear hand signals
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aircraft Signals NATOPS Manual, Chapter 8 (NAVAIR 00-80T-113) • E-28 Emergency Runway Arresting Gear, Sections 2, 5, and 8 (NAVAIR 51-5-31) • Naval Ships' Technical Manual, Chapter 613 Wire and Fiber Rope and Rigging, Section 1 (S9086-UU-STM-010/CH-613) • Aviation Boatswain's Mate H 3 & 2, Chapter 9 (NAVEDTRA 12368)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions on E-28 wire supports to include installation, safety, tools and equipment, spacing and runway widths, various types of wire supports, communication, and maintenance. The questions may be general in nature or situation specific.

Advancement Handbook for ABH3

General ABH <i>Skill Area</i>	Shipboard and Shore Station Maintenance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Perform flight and hangar deck scrubbing
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Required equipment • Mixing procedures • Safety procedures
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Naval Ships' Technical Manual, Chapter 634 Deck Covering, Section 6 (S9086-VG-STM-010/CH-634) • Aviation Boatswain's Mate H 3 & 2, Chapter 1 (NAVEDTRA 12368) • Air Department Standard Operating Procedures (SOP), Chapter 12 (COMNAVAIRPAC/AIRLANTINST 3100.4)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions on deck scrubbing to include department organization and responsibilities, equipment and material, foreign object damage (FOD) prevention, and safety. The questions may be general in nature or situation specific.

Advancement Handbook for ABH3

General ABH <i>Skill Area</i>	Shipboard and Shore Station Maintenance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain flight and hangar deck personal protective and safety equipment
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Inspecting float coat in accordance with PMS • Inspecting cranial in accordance with PMS • Proper flight deck uniform • Flight deck and hangar deck safety equipment • Airfield flight line safety equipment
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • LHA/LPH/LHD NATOPS Manual, Chapter 2 (NAVAIR 00-80T-106) • CV NATOPS Manual, Chapter 2 (NAVAIR 00-80T-105) • Aviation Boatswain's Mate H 3 & 2, Chapter 4 (NAVEDTRA 12368) • Air Department Standard Operating Procedures (SOP), Chapter 3 (COMNAVAIRPAC/AIRLANTINST 3100.4) • Ships' Maintenance and Material Management (3-M) Manual, Chapter 3 (OPNAVINST 4790.4C)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions on personal safety equipment and clothing to include equipment PMS, inspection, repair, and the flight deck color coding identification system. The questions may be general in nature or situation specific.

Advancement Handbook for ABH3

General ABH <i>Skill Area</i>	Shipboard and Shore Station Maintenance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Perform maintenance and repair on safety nets and padeyes
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Safety precautions • Inspection procedures in accordance with PMS • Safety net components • Padeye safe work load • Maintenance and repair tools
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Naval Ships' Technical Manual, Chapter 613 Wire and Fiber Rope and Rigging, Section 1 (S9086 – UU-STM-010/CH-613) • Aviation Boatswain's Mate H 3 & 2, Chapters 1 and 2 (NAVEDTRA 12368) • Use and Care of Hand Tools and Measuring Tools, Chapter 3, 6, and 7 (NAVEDTRA 12085) • Naval Safety Precautions for Forces Afloat, Chapter C8 (OPNAVINST 5100.19B) • Ships' Maintenance and Material Management (3-M) Manual, Chapter 3 (OPNAVINST 4790.4C)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions on maintaining and repairing safety nets to include safety, PMS, component identification, and tools. The questions may be general in nature or situation specific.

Advancement Handbook for ABH3

General ABH <i>Skill Area</i>	Shipboard and Shore Station Maintenance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Remove and apply nonskid
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Associated tools • Technical publications for nonskid • Types of nonskid • Surface preparation • Primer application • Nonskid application • Flight and hangar deck markings
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Naval Ships' Technical Manual, Chapter 634 Deck Covering, Sections 3.25 through 3.30 and 3.34.2 (S9086-VG-STM-010/CH-634) • Visual Landing Aids General Service Bulletin No.8, Revision K, enclosures 1 and 2 (NAVAIRWARCENACDIVLKE-IS33) • Aviation Boatswain's Mate H 3 & 2, Chapter 1 (NAVEDTRA 12368) • Air Department Standard Operating Procedures (SOP), Chapter 12 (COMNAVAIRPAC/AIRLANTINST 3100.4)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions on nonskid removal and application to include tools, publications, types of nonskid, steel surface preparation procedures, primer application procedures, nonskid application procedures, and VLA application procedures. The questions may be general in nature or situation specific.

Part 2

Advancement Handbook for ABH2

Advancement Handbook for ABH2

General ABH <i>Skill Area</i>	Shipboard and Shore Station Aircraft Handling
A <i>skill</i> you are expected to perform from the General Skill Area above:	Organize aircraft movement during launch and recovery operations
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Interpreting aircraft spot sheets • Briefing handling crews • Verifying support equipment safety checks • Verifying compliance with flight quarters clothing and signal wand requirements • Flight quarters organization and standard operating procedures • Evaluating deck conditions and potential hazards associated with aircraft movement • Aircraft handling terms used in a launch, recovery, and respot evolution • Safe handling characteristics for U.S. Naval aircraft
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • LHA/LPH/LHD NATOPS Manual, Chapters 2, 4, 5, 6, and Appendices C, F, G, and H (NAVAIR 00-80T-106) • CV NATOPS Manual, Chapters 2, 4, 5, 6, and Appendix C (NAVAIR 00-80T-105) • U.S. Navy Support Equipment Common Basic Handling & Safety Manual, Work Package 003 (NAVAIR 00-80T-96) • Aircraft Securing and Handling Procedures for Aircraft Restraining Devices and Related Components, Work Packages 006, 007, 008, 009, and 010 (NAVAIR 17-1-537) • Helicopter Operating Procedures for Air Capable Ships, Chapter 7, and Appendices D and E (NWP 3-04.1)

	<ul style="list-style-type: none"> • Aviation Boatswain's Mate H 3 & 2, Chapters 3 and 4 (NAVEDTRA 12368) • Air Department Standard Operating Procedures (SOP), Chapters 2 through 6 (COMNAVAIRPAC/AIRLANTINST 3100.4)
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions on organizing handling crews, aircraft movement, and spotting aircraft for launch and recovery operations to include required briefs, personal safety, flight quarters clothing, signal wands, standard operating procedures, terminology, and aircraft handling characteristics. The questions may be general in nature or situation specific.</p>

Advancement Handbook for ABH2

General ABH <i>Skill Area</i>	Shipboard and Shore Station Aircraft Handling
A <i>skill</i> you are expected to perform from the General Skill Area above:	Direct aircraft during launch, recovery, and respot
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Taxiing aircraft using NATOPS hand signals • Launching and recovering rotary wing aircraft using NATOPS hand signals • Spotting aircraft for catapult launch • Interpreting an aircraft spot sheet • Interpreting CV/CVN launch, recovery, and respot standard operating procedures • Interpreting LHA/LHD/LPD launch, recovery, and respot standard operating procedures • Monitoring turn radius and brake pressure requirements for aircraft • Support equipment capabilities • Determining distances of danger areas for inlet suction and exhaust of aircraft • Interpreting flight deck VLA markings
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • LHA/LPH/LHD NATOPS Manual, Chapters 2, 4, 5, and 6 (NAVAIR 00-80T-106) • CV NATOPS Manual, Chapters 2, 4, 5, and 6 (NAVAIR 00-80T-105) • Aircraft Signals NATOPS Manual, Chapters 2, 3, and 4 (NAVAIR 00-80T-113) • NATOPS U.S Navy Aircraft Emergency Rescue Information Manual Appendices A, B, C, and F (NAVAIR 00-80R-14-1) • U.S. Navy Support Equipment Common Basic Handling & Safety Manual, Work Packages 004 and 005 (NAVAIR 00-80T-96)

	<ul style="list-style-type: none"> • Aircraft Securing and Handling Procedures for Aircraft Restraining Devices and Related Components, Work Packages 003, 004, 005, 006, 007, 008, 009, and 010 (NAVAIR 17-1-537) • Visual Landing Aids General Service Bulletin NO. 8, Revision K, Paragraph 12 (NAVAIRWARCENACDIVLKE-IS33) • Helicopter Operating Procedures for Air Capable Ships, Chapter 7 and Appendix B (NWP 3-04.1) • Aviation Boatswain's Mate H 3 & 2, Chapters 2, 3, and 4 (NAVEDTRA 12368) • Air Department Standard Operating Procedures (SOP), Chapters 4, 5, and 6 (COMNAVAIRPAC/AIRLANTINST 3100.4)
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions on directing aircraft during launch, recovery, and respot operations to include taxi signals, fixed wing and rotary wing procedures, catapult procedures, safe turn radius and brake pressure, support equipment capabilities and characteristics, danger distances for suction and exhaust, and flight deck VLA. The questions may be general in nature or situation specific.</p>

Advancement Handbook for ABH2

General ABH <i>Skill Area</i>	Shipboard and Shore Station Aircraft Handling
A <i>skill</i> you are expected to perform from the General Skill Area above:	Direct vertical replenishment evolutions
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Directing aircraft using NATOPS signals • Hoisting slings and pennants • Enforcing VERTREP safety precautions • Standard operating procedures for VERTREP operations
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • LHA/LPH/LHD NATOPS Manual, Chapter 7 (NAVAIR 00-80T-106) • CV NATOPS Manual, Chapter 6 (NAVAIR 00-80T-105) • Aircraft Signals NATOPS Manual, Chapter 3 (NAVAIR 00-80T-113) • Helicopter Operating Procedures for Air Capable Ships, Chapter 8 (NWP 3-04.1) • Underway Replenishment, Chapter 10 (NWP 4-01.4)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions concerning vertical replenishment to include signals, equipment, safety, and operational procedures. The questions may be general in nature or situation specific.

Advancement Handbook for ABH2

General ABH <i>Skill Area</i>	Shipboard and Shore Station Aircraft Handling
A <i>skill</i> you are expected to perform from the General Skill Area above:	Direct loading of personnel
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Passenger movement and loading procedures • Air Transfer Officer, the Air Terminal Officer, and the Combat Cargo Officer operations • Safety precautions for personnel approaching aircraft
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • LHA/LPH/LHD NATOPS Manual, Chapters 2, 4, and 5 (NAVAIR 00-80T-106) • CV NATOPS Manual, Chapter 2 and 4 (NAVAIR 00-80T-105) • Department of Navy Air Terminal Procedures, Chapters 1, 2, 3, 4, and 5 (OPNAVINST 4660.3) • Helicopter Operating Procedures for Air Capable Ships, Chapters 2 and 7 (NWP 3-04.1) • Aviation Boatswain's Mate H 3 & 2, Chapter 3 (NAVEDTRA 12368) • Air Department Standard Operating Procedures (SOP), Chapter 1 and 10 (COMNAVAIRPAC/AIRLANTINST 3100.4)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions on directing the loading and unloading of personnel from aircraft to include shipboard and air terminal procedures, organization, and safety requirements. The questions may be general in nature or situation specific.

Advancement Handbook for ABH2

General ABH <i>Skill Area</i>	Shipboard and Shore Station Aircraft Handling
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor aircraft elevator operations
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Determining safe work load compliance • Watchstation responsibilities • Confirming aircraft and support equipment are spotted, tied down, and configured for elevator movement • Safety equipment and clothing • Procedures for at-sea operation • Procedures for inport operation • Nomenclature of elevator components • Emergency procedures • Communication equipment and procedures
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • LHA/LPH/LHD NATOPS Manual, Chapter 6 (NAVAIR 00-80T-106) • CV NATOPS Manual, Chapter 6 (NAVAIR 00-80T-105) • Aircraft Signals NATOPS Manual, Chapter 4 (NAVAIR 00-80T-113) • Aviation Boatswain's Mate H 3 & 2, Chapters 3 and 4 (NAVEDTRA 12368) • Air Department Standard Operating Procedures (SOP), Chapters 4 and 7 (COMNAVAIRPAC/AIRLANTINST 3100.4) • Shipboard Aviation Facilities Resume, Appendix D (NAEC-ENG-7576)

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions on aircraft elevator operations to include safe working load capacities, watchstations, tiedown requirements for aircraft and support equipment, aircraft configuration requirements, safety clothing, at-sea operation, inport operation, emergencies, and communications. The questions may be general in nature or situation specific.</p>
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Advancement Handbook for ABH2

General ABH <i>Skill Area</i>	Shipboard and Shore Station Aircraft Handling
A <i>skill</i> you are expected to perform from the General Skill Area above:	Dispatch support equipment during flight operations and respot evolutions
Knowledge you should have to perform this skill:	<ul style="list-style-type: none"> • Characteristics and capabilities of shore based and shipboard tow tractors • Shore based and shipboard towbar applications, characteristics, and capabilities • Support equipment placement for aircraft starts • Pre/post operational maintenance requirements on support equipment • Interpreting standard aircraft hand signals • Safety procedures and clothing requirements
References you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • LHA/LPH/LHD NATOPS Manual, Chapters 2, 4, and 6 (NAVAIR 00-80T-106) • CV NATOPS Manual, Chapters 2, 4, and 6 (NAVAIR 00-80T-105) • Aircraft Signals NATOPS Manual, Chapters 2, 3, and 4 (NAVAIR 00-80T-113) • U.S. Navy Support Equipment Common Basic Handling & Safety Manual, Work Packages 003, 004, and 005 (NAVAIR 00-80T-96) • Aircraft Securing and Handling Procedures for Aircraft Restraining Devices and Related Components, Work Package 003 – 008 and 010 (NAVAIR 17-1-537) • Aviation Boatswain's Mate H 3 & 2, Chapters 2, 3, and 4 (NAVEDTRA 12368) • Air Department Standard Operating Procedures (SOP), Chapters 2, 4, 7, 15, and Appendix B (COMNAVAIRPAC/AIRLANTINST 3100.4)

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions on dispatching support equipment during flight operations and respot to include equipment capabilities, characteristics, aircraft start procedures, maintenance requirements, signals, and safety. The questions may be general in nature or situation specific.</p>
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Advancement Handbook for ABH2

General ABH <i>Skill Area</i>	Aircraft Firefighting and Crash & Salvage
<i>A skill</i> you are expected to perform from the General Skill Area above:	Perform duties as a scene leader
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Fire chemistry • Firefighting agents • Firefighting organization • Firefighting tactics and procedures • Portable firefighting equipment and capabilities • Fixed firefighting equipment and capabilities • Firefighting manuals and publications • Rescue requirements • Scene leader commands and firefighting terminology
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • NATOPS U.S. Navy Aircraft Firefighting and Rescue Manual, Chapters 2, 3, 4, 6 – 9, and Appendix C (NAVAIR 00-80R-14) • NATOPS U.S. Navy Aircraft Emergency Rescue Information Manual, Chapter 2 (NAVAIR 00-80R-14-1) • Naval Ships' Technical Manual, Chapter 555 – Volume 1 Surface Ship Firefighting, Sections 1 - 4 (S9086-S3-STM-010/CH-555) • Aviation Boatswain's Mate H 3 & 2, Chapters 5 – 8 (NAVEDTRA 12368) • Air Department Standard Operating Procedures (SOP), Chapter 9 (COMNAVAIRPAC/AIRLANTINST 3100.4)

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions on scene leader responsibilities to include fire chemistry, firefighting agents, organization, tactics and procedures, fixed and portable firefighting equipment, manuals and publications, rescue procedures, commands, and terminology. The questions may be general in nature or situation specific.</p>
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Advancement Handbook for ABH2

General ABH <i>Skill Area</i>	Aircraft Firefighting and Crash & Salvage
A <i>skill</i> you are expected to perform from the General Skill Area above:	Perform duties as a crash forklift operator
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Crash and salvage equipment • Inspection and testing criteria for platforms, slings, dollies, and boom adapters • Crash forklift capacities • Crash crew organization • Standard hand signals for crane operators and signalmen • Aircraft weight distribution • Forklift salvage procedures for nose and main landing gear damage • Aircraft characteristics and safety precautions
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • NATOPS U.S. Navy Aircraft Firefighting and Rescue Manual, Chapters 7 and 8 (NAVAIR 00-80R-14) • NATOPS U.S. Navy Aircraft Emergency Rescue Information Manual, Chapter 2 (NAVAIR 00-80R-14-1) • NATOPS U.S. Navy Aircraft Crash & Salvage Operations Manual (Afloat), Chapters 2, 4, 5, and 6 (NAVAIR 00-80R-19) • Aviation Boatswain's Mate H 3 & 2, Chapters 2 and 7 (NAVEDTRA 12368) • Air Department Standard Operating Procedures (SOP), Chapter 9 (COMNAVAIRPAC/AIRLANTINST 3100.4)

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions on crash forklift operator duties to include crash equipment, test and inspection criteria, forklift capacities, organization, hand signals, aircraft characteristics, lifting procedures, and safety precautions. The questions may be general in nature or situation specific.</p>
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Advancement Handbook for ABH2

General ABH <i>Skill Area</i>	Aircraft Fighting and Crash & Salvage
A <i>skill</i> you are expected to perform from the General Skill Area above:	Perform duties as a twin agent unit operator
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • TAU characteristics • Components • Agent capacities • Mixing and filling procedures • Principles of operation • Safety precautions
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • NATOPS U.S. Navy Aircraft Firefighting and Rescue Manual, Chapter 4 (NAVAIR 00-80R-14) • U.S. Navy Support Equipment Common Basic Handling & Safety Manual, Work Package 016 (NAVAIR 00-80T-96) • Aviation Boatswain's Mate H 3 & 2, Chapter 5 (NAVEDTRA 12368)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions on the twin agent unit to include equipment characteristics, component identification, agent capacities, maintenance, operating procedures, and safety precautions. The questions may be general in nature or situation specific.

Advancement Handbook for ABH2

General ABH <i>Skill Area</i>	Aircraft Firefighting and Crash & Salvage
A <i>skill</i> you are expected to perform from the General Skill Area above:	Perform duties as a mobile firefighting equipment (P-16) operator
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • P-16 characteristics • P-16 components • Firefighting agent capacities • Mixing and filling procedures • Principles of operation • Safety precautions
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • NATOPS U.S. Navy Aircraft Firefighting and Rescue Manual, Chapter 4 (NAVAIR 00-80R-14) • U.S. Navy Support Equipment Common Basic Handling & Safety Manual, Work Package 016 (NAVAIR 00-80T-96) • Aviation Boatswain's Mate H 3 & 2, Chapter 5 (NAVEDTRA 12368)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions on the P-16 mobile firefighting vehicle to include equipment characteristics, component identification, agent capacities, maintenance, operating procedures, and safety precautions. The questions may be general in nature or situation specific.

Advancement Handbook for ABH2

General ABH <i>Skill Area</i>	Shore Based Emergency Arresting Gear Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Repair E-28 arresting gear arrester engines
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Arrester engine components • Arrester engine operating principals • E-28 technical manual and maintenance instruction • E-28 arresting gear design characteristics • Interpretation of an E-28 arresting gear drawing/schematic • Arresting gear inspection requirements • Replacement criteria for arresting gear components • Runway arresting gear report • Special tools required for arresting gear maintenance • Runway arresting gear hand signals • Safety precautions
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aircraft Signals NATOPS Manual, Chapter 8 (NAVAIR 00-80T-113) • E-28 Emergency Runway Arresting Gear, Sections 1 - 10 (NAVAIR 51-5-31) • Aviation Boatswain's Mate H 3 & 2, Chapter 9 (NAVEDTRA 12368) • Use and Care of Hand Tools and Measuring Tools, Chapter 25 (NAVEDTRA 12085)

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions on the E-28 shore based arresting gear to include arrester engine component identification, operating principals, technical manual and maintenance instruction familiarization, design characteristics, drawing and schematic interpretation, inspection criteria, component replacement criteria, runway arresting gear report, tools, air field hand signals, and safety precautions. The questions may be general in nature or situation specific.</p>
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Advancement Handbook for ABH2

General ABH <i>Skill Area</i>	Shore Based Emergency Arresting Gear Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Repair E-28 arresting gear retrieve system
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Retrieve system assemblies • Retrieve system operating principals • E-28 arresting gear technical manual and maintenance instruction • E-28 arresting gear design characteristics • Interpretation of an E-28 arresting gear drawing/schematic • E-28 arresting gear inspection requirements • Replacement criteria for arresting gear components • Special tools required for arresting gear maintenance • Runway arresting gear hand signals • Safety precautions
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aircraft Signals NATOPS Manual, Chapter 8 (NAVAIR 00-80T-113) • E-28 Emergency Runway Arresting Gear, Sections 1 - 10 (NAVAIR 51-5-31) • Aviation Boatswain's Mate H 3 & 2, Chapter 9 (NAVEDTRA 12368) • Use and Care of Hand Tools and Measuring Tools, Chapter 25 (NAVEDTRA 12085)

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions on the E-28 shore based arresting gear retrieve system to include systems assemblies, component identification, operating principals, technical manual and maintenance instruction familiarization, design characteristics, drawing and schematic interpretation, inspection criteria, component replacement criteria, runway arresting gear report, tools, air field hand signals, and safety precautions. The questions may be general in nature or situation specific.</p>
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Part 3

Advancement Handbook for ABH1

Advancement Handbook for ABH1

General ABH <i>Skill Area</i>	Shipboard and Shore Station Aircraft Handling
A <i>skill</i> you are expected to perform from the General Skill Area above:	Conduct VERTREP operations
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Safety requirements for VERTREP evolutions • Flight deck organization requirements and responsibilities for VERTREP evolutions • Grounding wand requirements • Aircraft hand signals • Internal and external load transfer procedures • VERTREP equipment safe working loads and capacities • VERTREP VLA markings
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • LHA/LPH/LHD NATOPS Manual, Chapter 7 (NAVAIR 00-80T-106) • CV NATOPS Manual, Chapter 6 (NAVAIR 00-80T-105) • Aircraft Signals NATOPS Manual, Chapter 3 (NAVAIR 00-80T-113) • Helicopter Operating Procedures for Air Capable Ships, Chapter 8 (NWP 3-04.1) • Underway Replenishment, Chapter 10 (NWP 4-01.4) • Aviation Boatswain's Mate H 3 & 2, Chapter 3 (NAVEDTRA 12368)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions on VERTREP operations to include safety, organization, responsibilities, static discharge, hand signals, operations, equipment, and VLA markings. The questions may be general in nature or situation specific.

Advancement Handbook for ABH1

General ABH <i>Skill Area</i>	Shipboard and Shore Station Aircraft Handling
A <i>skill</i> you are expected to perform from the General Skill Area above:	Reeve cables on a mobile aircraft crane
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Characteristics, components, and leading particulars on the Aircraft Crash Crane (CVCC) • Characteristics, components, and leading particulars on the Amphibious Aviation Ship Crash Crane (AACC) • Wire rope and cable handling procedures • Standard hand signals for crane operators and signalmen • Crash crane safety precautions
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • NATOPS U.S. Navy Aircraft Crash & Salvage Operations Manual (Afloat), Chapters 4 and 6 (NAVAIR 00-80R-19) • U.S. Navy Support Equipment Common Basic Handling & Safety Manual, Work Package 006 (NAVAIR 00-80T-96) • Aviation Boatswain's Mate H 3 & 2, Chapters 6 and 7 (NAVEDTRA 12368) • Aircraft Crash Handling and Salvage Crane A/S 2A-36, Work Packages 003, 004, and 005 (AG-310DO-OMM-000)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions on crash and salvage cranes to include characteristics, component identification, capabilities, capacities, safe working loads, wire rope and cable, crane hand signals, and safety precautions. The questions may be general in nature or situation specific.

Advancement Handbook for ABH1

General ABH <i>Skill Area</i>	Aircraft Firefighting and Crash & Salvage
<i>A skill</i> you are expected to perform from the General Skill Area above:	Test flight and hangar deck sprinkler valves
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Operating procedures for flight and hangar deck sprinkler systems • Requirements for operable AFFF services • Requirements for flight and hangar deck AFFF firefighting readiness • Injection station high capacity tank level requirements • Communication procedures for watch stations • Interpreting AFFF troubleshooting flow chart • Functions and capabilities of pumps and valves associated with sprinkler system • System activation locations
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • NATOPS U.S. Navy Aircraft Firefighting and Rescue Manual, Chapters 3, 7, 8, and 9 (NAVAIR 00-80R-14) • Naval Ships' Technical Manual, Chapter 555 – Volume 1 Surface Ship Firefighting, Sections 1, 2, and 3 (S9086-S3-STM-010/CH-555) • Aviation Boatswain's Mate H 3 & 2, Chapter 3 (NAVEDTRA 12368) • Air Department Standard Operating Procedures (SOP), Chapter 11 (COMNAVAIRPAC/AIRLANTINST 3100.4)

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions on flight and hangar deck sprinkler systems to include operating procedures, requirements for an operable system, requirements for flight quarters readiness, injection station AFFF tank capacities, communication, troubleshooting flow chart, pumps and valves, and system activation locations. The questions may be general in nature or situation specific.</p>
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Advancement Handbook for ABH1

General ABH <i>Skill Area</i>	Aircraft Firefighting and Crash & Salvage
A <i>skill</i> you are expected to perform from the General Skill Area above:	Direct crash, fire, and rescue groups
Knowledge you should have to perform this skill:	<ul style="list-style-type: none"> • Firefighting procedures for flight deck, hangar deck, and airfield evolutions • Initial response requirements for aircraft and fuel station fires • Runway alert requirements • Protective clothing requirements • Rescue procedures for flight deck, hangar deck, and airfield evolutions • Scene leader communication procedures • Directing as a background scene leader • Ejection seat safety procedures for naval aircraft • Aircraft entry procedures • Air crew release and removal procedures • Ordnance cooling procedures • Safety procedures
References you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • NATOPS U.S. Navy Aircraft Firefighting and Rescue Manual, Chapters 2 - 9 (NAVAIR 00-80R-14) • NATOPS U.S. Navy Aircraft Emergency Rescue Information Manual, Chapters 2 and 3 and Appendices A, B, C, and F (NAVAIR 00-80R-14-1) • NATOPS U.S. Navy Aircraft Crash & Salvage Operations Manual (Afloat), Chapters 2 and 3 (NAVAIR 00-80R-19) • NATOPS U.S. Navy Aircraft Crash & Salvage Operations Manual (Ashore), Chapters 2 and 3 (NAVAIR 00-80R-20)

	<ul style="list-style-type: none"> • U.S. Navy Support Equipment Common Basic Handling & Safety Manual, Work Package 016 (NAVAIR 00-80T-96) • Naval Ships' Technical Manual, Chapter 555 – Volume 1 Surface Ship Firefighting, Sections 1 - 4 (S9086-S3-STM-010/CH-555) • Aviation Boatswain's Mate H 3 & 2, Chapters 5 - 8 (NAVEDTRA 12368) • Air Department Standard Operating Procedures (SOP), Chapter 9 (COMNAVAIRPAC/AIRLANTINST 3100.4)
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions on directing crash, fire, and rescue units to include shipboard and shore station firefighting, initial response, runway alerts, protective clothing, firefighting team organization, communication, rescue procedures, ejection seat precautions, aircraft entry, air crew release and removal, background scene leader, ordnance cooling, and safety precautions. The questions may be general in nature or situation specific.</p>

Advancement Handbook for ABH1

General ABH <i>Skill Area</i>	Aircraft Firefighting and Crash & Salvage
<i>A skill</i> you are expected to perform from the General Skill Area above:	Perform duties as a crash crane operator
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Salvage procedures for naval aircraft • Hoisting procedures for naval aircraft • Hoisting equipment inspection criteria • Installation procedures for manufacturers hoisting slings • Installation procedures for universal aircraft fabric hoisting slings • Lifting capacities of the CVCC and the AACC • Leading particulars and vehicle characteristics of the CVCC and the AACC • Aircraft weight distribution • NATOPS technical manuals for crash and salvage operations afloat and ashore • Standard hand signals for crane operators and signalmen • Crash and salvage organization • Safety precautions
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • NATOPS U.S. Navy Aircraft Crash & Salvage Operations Manual (Afloat), Chapters 2, 4, 5, and 6, and Appendices A, B, E, G, H, J, K, L, O, S, U, and X (NAVAIR 00-80R-19) • NATOPS U.S. Navy Aircraft Crash & Salvage Operations Manual (Ashore), Chapters 2 – 8 and Appendices K, M, P, Q, S, Y, CC, EE, and HH (NAVAIR 00-80R-20) • U.S. Navy Support Equipment Common Basic Handling & Safety Manual, Work Package 006 (NAVAIR 00-80T-96)

	<ul style="list-style-type: none"> • Aviation Boatswain's Mate H 3 & 2, Chapters 2, 7, and 8 (NAVEDTRA 12368) • Air Department Standard Operating Procedures (SOP), Chapter 9 (COMNAVAIRPAC/AIRLANTINST 3100.4) • Aircraft Crash Handling and Salvage Crane A/S 32A-36, Work Packages 002, 003, and 004 (AG-310DO-OMM-000)
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions on crash crane operations to include salvage, hoisting, equipment inspection, manufactured slings, universal fabric slings, crash crane lifting capacities, leading particulars, aircraft weight distribution, NAVAIR manuals, hand signals, crash organization, and safety precautions. The questions may be general in nature or situation specific.</p>

Advancement Handbook for ABH1

General ABH <i>Skill Area</i>	Shore based Emergency Arresting Gear Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor E-28 arresting gear operations
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Operating procedures • Design characteristics • Arrestor engine components • Retrieve system assembly • Deck pendant wire support requirements • Functional inspection requirements • Runway arresting gear engagement report • Operating torque wrenches, ratchets, and accessory equipment • Airfield arresting gear hand signals • Safety precautions
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aircraft Signals NATOPS Manual, Chapter 8 (NAVAIR 00-80T-113) • E-28 Emergency Runway Arresting Gear, Sections 2 - 6 (NAVAIR 51-5-31) • Naval Ships' Technical Manual, Chapter 613 Wire and Fiber Rope and Rigging, Section 1 (S9086-UU-STM-010/CH-613) • Aviation Boatswain's Mate H 3 & 2, Chapter 9 (NAVEDTRA 12368) • Use and Care of Hand Tools and Measuring Tools, Chapter 25 (NAVEDTRA 12085)

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions on the E-28 arresting gear to include operating procedures, design characteristics, arrester engine components, retrieve system, wire supports, functional inspections, engagement report, tools, equipment, hand signals, and safety precautions. The questions may be general in nature or situation specific.</p>
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Advancement Handbook for ABH1

General ABH <i>Skill Area</i>	Shore Based Emergency Arresting Gear Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Troubleshoot E-28 arresting gear systems
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Troubleshooting procedures for the retrieve system • Troubleshooting procedures for the arrester engine components • Repair and replacement criteria for pennants, purchase tapes, and wire supports • Repair and replacement criteria for tape connectors and sheaves • Interpreting troubleshooting, lubrication, and general arrangement charts • Safety precautions
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aircraft Signals NATOPS Manual, Chapter 8 (NAVAIR 00-80T-113) • E-28 Emergency Runway Arresting Gear, Sections 2 – 8 (NAVAIR 51-5-31) • Aviation Boatswain's Mate H 3 & 2, Chapter 9 (NAVEDTRA 12368)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions on troubleshooting the E-28 arresting gear to include the retrieve system, arrester engine assembly, pendants, tapes, wire supports, tape connectors, sheaves, charts, and safety. The questions may be general in nature or situation specific.

Advancement Handbook for ABH1

General ABH <i>Skill Area</i>	Shipboard and Shore Station Maintenance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Organize flight and hangar deck scrubbing
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Materials and equipment for shipboard cleaning • Cleaning techniques • Inspecting nonskid coatings • Principles of nonskid application • Principles of corrosion • Safety precautions
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Naval Ships' Technical Manual, Chapter 634 Deck Covering, Sections 3 and 6 (S9086-VG-STM-010/CH-634) • Aviation Boatswain's Mate H 3 & 2, Chapter 1 (NAVEDTRA 12368) • Air Department Standard Operating Procedures (SOP), Chapter 12 (COMNAVAIRPAC/AIRLANTINST 3100.4)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions on non skid maintenance to include scrubbing procedures, material and equipment, coating inspection, replacement criteria, application procedures, corrosion, and safety precautions. The questions may be general in nature or situation specific.

Part 4

Advancement Handbook for ABHC

Advancement Handbook for ABHC

General ABH <i>Skill Area</i>	Shipboard and Shore Station Aircraft Handling
A <i>skill</i> you are expected to perform from the General Skill Area above:	Coordinate aircraft movement and spotting
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Duties and responsibilities of personnel during flight quarters • Flight deck, hangar deck, and flight line safety precautions • Authorized flight quarters clothing • Pre-launch procedures and evolutions for fixed and rotary winged aircraft • Launch, recovery, and respot procedures for naval aircraft • V/STOL aircraft handling procedures • Aircraft towing and taxiing procedures • Standard hand signals • Handling characteristics of naval aircraft • Support equipment characteristics • Aircraft handling technical publications • Preparing an aircraft spot sheet • Flight and hangar deck markings
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • LHA/LPH/LHD NATOPS Manual, Chapters 2, 4, 5, 6, and Appendix E (NAVAIR 00-80T-106) • CV NATOPS Manual, Chapters 2, 4, 5, and 6 (NAVAIR 00-80T-105) • Aircraft Signals NATOPS Manual, Chapters 2, 3, and 4 (NAVAIR 00-80T-113) • U.S. Navy Support Equipment Common Basic Handling & Safety Manual, Work Packages 003, 004, and 005 (NAVAIR 00-80T-96)

	<ul style="list-style-type: none"> • Aircraft Securing and Handling Procedures for Aircraft Restraining Devices and Related Components, Work Packages 003 - 010 (NAVAIR 17-1-537) • Visual Landing Aids General Service Bulletin NO. 8, Revision K, Enclosures 1 and 2 (NAVAIRWARCENACDIVLKE-IS33) • Helicopter Operating Procedures for Air Capable Ships, Chapters 7 and 8 (NWP 3-04.1) • Aviation Boatswain's Mate H 3 & 2, Chapters 2, 3, and 4 (NAVEDTRA 12368) • Air Department Standard Operating Procedures (SOP), Chapters 1 – 7, 10 - 13, 16, and Appendices A and B (COMNAVAIRPAC/AIRLANTINST 3100.4) • Shipboard Aviation Facilities Resume, Appendices A - D (NAEC-ENG-7576) • Maximum Density Aircraft Spotting, CV/CVN and LHA/LHD Class Ships, Tables 1 - 8 (NAEC-ENG-7604)
<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions on coordinating aircraft movement to include flight quarters responsibilities, safety, flight quarters clothing, pre-launch procedures, launch procedures, recovery procedures, V/STOL procedures, towing, taxiing, hand signals, aircraft characteristics, support equipment characteristics, publications, spot sheets, and VLA markings. The questions may be general in nature or situation specific.</p>

Advancement Handbook for ABH3

General ABH <i>Skill Area</i>	Shipboard and Shore Station Aircraft Handling
<i>A skill</i> you are expected to perform from the General Skill Area above:	Monitor VERTREP operations
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Vertical replenishment and external lift operating areas • Hookup procedures • VERTREP equipment characteristics • VERTREP procedures • Hand signals • Safety procedures
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • LHA/LPH/LHD NATOPS Manual, Chapter 7 (NAVAIR 00-80T-106) • CV NATOPS Manual, Chapter 6 (NAVAIR 00-80T-105) • Aircraft Signals NATOPS Manual, Chapter 3 (NAVAIR 00-80T-113) • Helicopter Operating Procedures for Air Capable Ships, Chapter 8 (NWP 3-04.1) • Underway Replenishment, Chapter 10 (NWP 4-01.4) • Aviation Boatswain's Mate H 3 & 2, Chapter 4 (NAVEDTRA 12368)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	<ul style="list-style-type: none"> • You can expect questions on VERTREP operations to include operating areas, load hookup, equipment characteristics, VERTREP procedures, hand signals, and safety. The questions may be general in nature or situation specific.

Advancement Handbook for ABHC

General ABH <i>Skill Area</i>	Shipboard and Shore Station Aircraft Handling
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor air terminal operations
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Department of the Navy air terminal procedures • Schedule board requirements • Passenger inspection policy • Passenger handling procedures • Arms and ammunition handling procedures • Manifesting procedures • Baggage requirements • Cargo handling procedures • U.S. mail handling procedures • Prisoner and patient handling procedures
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Department of Navy Air Terminal Procedures, Chapters 1 - 7 (OPNAVINST 4660.3) • Aviation Boatswain's Mate H 3 & 2, Chapter 3 (NAVEDTRA 12368)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions on air terminal procedures to include the schedule board, inspection policies, passenger handling, firearms and ammunition handling, passenger manifesting, cargo handling, U.S. mail requirements, prisoner transportation, and MEDIVAC requirements. The questions may be general in nature or situation specific.

Advancement Handbook for ABHC

General ABH <i>Skill Area</i>	Aircraft Firefighting and Crash & Salvage
A <i>skill</i> you are expected to perform from the General Skill Area above:	Coordinate activation of flight deck countermeasures washdown system
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Activation locations • HICAP AFFF tank capacities • Injection pump system • Valve nomenclature and function • Safety procedures • Interpretation of a system drawing or schematic
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • NATOPS U.S. Navy Aircraft Firefighting and Rescue Manual, Chapters 6, 7, and 8 (NAVAIR 00-80R-14) • Naval Ships' Technical Manual, Chapter 555 – Volume 1 Surface Ship Firefighting, Sections 2 and 3 (S9086-S3-STM-010/CH-555) • Aviation Boatswain's Mate H 3 & 2, Chapter 5 (NAVEDTRA 12368)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions on the countermeasures washdown system to include the AFFF high capacity system, injection stations, valves, safety, and drawing and schematic interpretation. The questions may be general in nature or situation specific.

Advancement Handbook for ABHC

General ABH <i>Skill Area</i>	Aircraft Firefighting and Crash & Salvage
<i>A skill</i> you are expected to perform from the General Skill Area above:	Assist in aircraft accident investigations
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Air field emergency communication system • Notification procedures • Mutual assistance and administrative requirements • Aircraft firefighting and rescue daily journal requirements • Air field crash grid map requirements • Required reports for aircraft handling mishaps
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • NATOPS U.S. Navy Aircraft Firefighting and Rescue Manual, Chapter 5 (NAVAIR 00-80R-14) • Aviation Boatswain's Mate H 3 & 2, Chapter 8 (NAVEDTRA 12368) • Air Department Standard Operating Procedures (SOP), Chapter 14 (COMNAVAIRPAC/AIRLANTINST 3100.4)
<i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:	You can expect questions on aircraft accident and mishap investigation to include communication system, notification process, mutual assistance, administration, daily journal, grid map, and aircraft handling mishap reports. The questions may be general in nature or situation specific.

Advancement Handbook for ABHC

General ABH <i>Skill Area</i>	Shore Based Emergency Arresting Gear Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor overhaul and repair of E-28 arresting gear
<i>Knowledge</i> you should have to perform this skill:	<ul style="list-style-type: none"> • Troubleshooting procedures for the arresting gear system and assemblies • Leading particulars for the arresting gear system and assemblies • Replacement criteria for arresting gear components • Interpreting drawings and schematics • Operating principles of the E-28 arresting gear • Operating principles for E-28 arresting gear accessory equipment • Wire support spacing requirements • Taxiing aircraft precautions for deck pendant crossings • Functional inspection requirements • Runway arresting gear engagement report • Operating required specialized tools, ratchets, and torque wrenches • Safety precautions
<i>References</i> you should study to gain the knowledge you need to perform this skill:	<ul style="list-style-type: none"> • Aircraft Signals NATOPS Manual, Chapter 8 (NAVAIR 00-80T-113) • E-28 Emergency Runway Arresting Gear, Sections 1 – 10 (NAVAIR 51-5-31) • Naval Ships' Technical Manual, Chapter 613 Wire and Fiber Rope and Rigging, Section 1 (S9086-UU-STM-010/CH-613) • Aviation Boatswain's Mate H 3 & 2, Chapter 9 (NAVEDTRA 12368)

<p><i>Exam Expectations.</i> These are subject areas you should know to help you answer exam questions correctly:</p>	<p>You can expect questions on the E-28 arresting gear system to include troubleshooting, repair, and overhaul procedures, component replacement criteria, drawings, schematics, operation principles, wire support spacing, aircraft precautions, functional inspections, engagement report, tools, and safety precautions. The questions may be general in nature or situation specific.</p>
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Appendix A

References Used in This Advancement Handbook

Rating	Short Title	Long Title	Chapters/ Paragraphs	Stocking Point
ABH3	NAVAIR 00-80T106	LHA/LPH/LHD NATOPS Manual	Chapters 1, 2, 4, 5, & 6, and Appendices E & G	Note 1
	NAVAIR 00-80T-105	CV NATOPS Manual	Chapters 1, 2, 3, 4, 5, & 6, and Appendix C	Note 1
	NAVAIR 00-80T-113	Aircraft Signals NATOPS Manual	Chapters 2, 3, 4, & 8	Note 1
	NAVAIR 00-80R-14	NATOPS U.S. Navy Aircraft Firefighting and Rescue Manual	Chapters 2, 3, 4, 7, 8, & 9, and Appendix D	Note 1
	NAVAIR 00-80R-14-1	NATOPS U.S. Navy Aircraft Emergency Rescue Information Manual	Chapters 2 & 3, and Appendices A, B, C, D, E, & F	Note 1
	NAVAIR 00-80R-19	NATOPS U.S. Navy Aircraft Crash & Salvage Operations Manual (Afloat)	Chapters 2, 3, 4, 5, & 6, and Appendices A, B, C, E, F, G, H, J, K, L, O, P, U, & W	Note 1
	NAVAIR 00-80R-20	NATOPS U.S. Navy Aircraft Crash & Salvage Operations Manual (Ashore)	Chapters 4 & 8, and Appendices C through HH	Note 1
	NAVAIR 00-51-5-31	E-28 Emergency Runway Arresting Gear	Sections 1, 2, 5, & 8	Note 1
	NAVAIR 00-80T-96	U.S. Navy Support Equipment Common Basic Handling & Safety Manual	Work Packages 003, 004, 005, 006, 012, & 016	Note 1
	NAVAIR 17-1-537	Aircraft Securing and Handling Procedures for Aircraft Restraining Devices and Related Components	Work packages 003, 004, 005, 006, 007, 008, 009, 010, & 012	Note 1
	S9086-UU-STM-010/CH-613	Naval Ships' Technical Manual, Chapter 613, Wire Rope and Rigging	Sections 1 & 2	Note 1
	S9086-VD-STM-010/CH-634	Naval Ships' Technical Manual, Chapter 634, Deck Covering	Chapters 3 & 6	Note 1
	S9086-S3-STM-010/CH-555	Naval Ships' Technical Manual, Volume 1, Surface Ship Firefighting	Sections 1, 2, 3, 4, & 7	Note 1
ABH3 (Cont)	VLAGSB-8-R-K	Visual Landing Aids General Service Bulletin No. 8	Paragraphs 1, 2, & 12	Note 1

Rating	Short Title	Long Title	Chapters/ Paragraphs	Stocking Point
	NWP 3-04.1	Helicopter Operating Procedures for Air Capable Ships	Chapters 2, 4, 7, 9, & 10, and Appendix B	Notes 1 & 2
	NAVEDTRA 12368	Aviation Boatswain's Mate H 3 & 2	Chapters 1, 2, 3, 4, 5, 6, 7, & 9	Note 1
	NAVEDTRA 12085	Use and Care of Hand Tools and Measuring Tools	Chapters 3, 6, 7, 17, 21, 22, 25, & 32	Note 1
	COMNAVAIRPAC/AIRLAN TINST 3100.4	Air Department Standard Operating Procedures (SOP)	Chapters 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 14, & 15	Note 3
	OPNAVINST 5100.19	Naval Safety Precautions for Forces Afloat	Chapter C-8	Note 4
	OPNAVINST 4790.4	Ships' Maintenance and Material Management Manual	Chapter 3	Note 4
	AG-310DO-OMM-000	Aircraft Crash Handling and Salvage Crane, A/S 32A-36	Work Packages 003, 004, & 005	Note 1
	NAEC-ENG-7576	Shipboard Aviation Facilities Resume	Appendix D	Note 1
ABH2	NAVAIR 00-80T-106	LHA/LPH/LHD NATOPS Manual	Chapters 2, 4, 5, 6, & 7, and Appendices C, F, G, & H	Note 1
	NAVAIR 00-80T-105	CV NATOPS Manual	Chapters 2, 4, 5, & 6, and Appendix C	Note 1
	NAVAIR 00-80T-96	U.S. Navy Support Equipment Common Basic Handling & Safety Manual	Work packages 003, 004, 005, 006, 007, 008, 009, 010 & 016	Note 1
	NAVAIR 17-1-537	Aircraft Securing and Handling Procedures for Aircraft Restraining Devices and Related Components	Work packages 003, 004, 005, 006, 007, 008, 009 & 010	Note 1
	NWP 3-04.1	Helicopter Operating Procedures for Air Capable Ships	Chapters 2, 7 & 8, and Appendices B, D & E	Note 1 & 2
	NAVEDTRA 12368	Aviation Boatswain's Mate H 3 & 2	Chapters 2, 3, 4, 5, 6, 7, 8, & 9	Note 1
ABH2 (Cont)	COMNAVAIRPAC/AIRLAN TINST 3100.4	Air Department Standard Operating Procedures (SOP)	Chapters 1, 2, 3, 4, 5, 6, 7, 9, 10, & 15, and Appendix B	Note 3
	NAVAIR 00-80T-113	Aircraft Signals NATOPS Manual	Chapters 2, 3, 4, & 8	Note 1

Rating	Short Title	Long Title	Chapters/ Paragraphs	Stocking Point
	NAVAIR 00-80R-14-1	NATOPS U.S. Navy Aircraft Emergency Rescue Information Manual	Chapter 2 and Appendices A, B, C, & F	Note 1
	VLASB-8-R-K	Visual Landing Aids General Service Bulletin No 8 Rev. K	Paragraph 12	Note 1
	NWP 4-01.4	Underway Replenishment	Chapter 10	Notes 1 & 2
	OPNAVINST 4660.3	Department of Navy Air Terminal Procedures	Chapters 1, 2, 3, 4, & 5	Note 4
	NAEC-ENG-7576	Shipboard Aviation Facilities Resume	Appendix D	Note 1
	NAVAIR 00-80R-14	NATOPS U.S. Navy Firefighting and Rescue Manual	Chapters 2, 3, 4, 6, 7, 8, & 9, and Appendix C	Note 1
	S9086-S3-STM-010/CH-555	Naval Ships' Technical Manual, Chapter 555, Volume 1 Surface Ship Firefighting	Sections 1, 2, 3, & 4	Note 1
	NAVAIR 00-80R-19	NATOPS U.S. Navy Aircraft Crash & Salvage Operations Manual	Chapters 2, 4, 5, & 6	Note 1
	NAVAIR 51-5-31	E-28 Emergency Runway Arresting Gear	Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, & 10	Note 1
	NAVEDTRA 12085	Use and Care of Hand Tools and Measuring Tools	Chapter 25	Note 1
ABH1	NAVAIR 00-80T-106	LHA/LPH/LHD NATOPS Manual	Chapter 7	Note 1
	NAVAIR 00-80T-105	CV NATOPS Manual	Chapter 6	Note 1
	NAVAIR 00-80T-113	Aircraft Signals Manual	Chapter 6	Note 1
	NWP 3-04.1	Helicopter Operating Procedures for Air Capable Ships	Chapter 8	Notes 1 & 2
	NWP 4-01.4	Underway Replenishment	Chapter 10	Notes 1 & 2
	NAVEDTRA 12368	Aviation Boatswain's Mate H 3 & 2	Chapters 1, 2, 3, 4, 5, 6, 7, 8, & 9	Note 1
	NAVAIR 00-80R-19	NATOPS U.S. Navy Aircraft Crash & Salvage Operations Manual (Afloat)	Chapters 2, 3, 4, 5, & 6, and Appendices A, B, E, G, H, K, L, O, S, U, & X	Note 1
ABH1 (Cont)	NAVAIR 00-80T-96	U.S. Navy Support Equipment Common Basic Handling & Safety Manual	Work Packages 006 & 016	Note 1
	AS-310DO-OMM-000	Aircraft Crash Handling and Salvage Crane A/S 32A-36	Work Packages 002, 003, 004, & 005	Note 1
	NAVAIR 00-80R-14	NATOPS U.S. Navy Aircraft Firefighting and Rescue Manual	Chapters 2, 3, 4, 5, 6, 7, 8, & 9	Note 1

Rating	Short Title	Long Title	Chapters/ Paragraphs	Stocking Point
	S9086-S3-STM-010/CH-555	Naval Ships' Technical Manual, Chapter 555, Volume 1 Surface Ship Firefighting	Sections 1, 2, 3, & 4	Note 1
	COMNAVAIRPAC/AIRLAN TINS 3100.4	Air Department Standard Operating Procedures (SOP)	Chapters 9, 11, & 12	Note 3
	NAVAIR 00-80R-14-1	NATOPS U.S. Navy Aircraft Emergency Rescue Information Manual	Chapters 2 & 3, and Appendices A, B, C, & F	Note 1
	NAVAIR 00-80R-20	NATOPS U.S. Navy Aircraft Crash & Salvage Operations Manual (Ashore)	Chapters 2, 3, 4, 5, 6, 7, & 8, and Appendices K, M, P, Q, S, Y, CC, EE, & HH	Note 1
	NAVAIR 51-5-31	E-28 Emergency Runway Arresting Gear	Sections 2, 3, 4, 5, 6, 7, & 8	Note 1
	S9086-UU-STM-010/CH-613	Naval Ships' Technical Manual, Chapter 613, Wire and Fiber Rope and Rigging	Section 1	Note 1
	NAVEDTRA 12085	Use and Care of Hand Tools and Measuring Equipment	Section 1	Note 1
	S9086-VG-STM-010/CH-634	Naval Ships' Technical Manual, Chapter 634, Deck Coverings	Sections 3 & 6	Note 1
ABHC	NAVAIR 00-80T-106	LHA/LPH/LHD NATOPS Manual	Chapters 2, 4, 5, & 6, and Appendix B	Note 1
	NAVAIR 00-80T-105	CV NATOPS Manual	Chapters 2, 3, 4, & 8	Note 1
	NAVAIR 00-80R-14	NATOPS U.S. Navy Aircraft Firefighting and Rescue Manual	Chapters 5, 6, 7, & 8	Note 1
	NAVAIR 51-5-31	E-28 Emergency Runway Arresting Gear	Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, & 10	Note 1
ABHC (Cont)	NAVAIR 00-80T-96	U.S. Navy Support Equipment Common Basic Handling & Safety Manual	Work Packages 003, 004, & 005	Note 1
	NAVAIR 17-1-537	Aircraft Securing and Handling Procedures for Aircraft Restraining Devices and Related Components	Work Packages 003, 004, 005, 006, 007, 008, 009, & 010	Note 1
	S9086-UU-STM-010/CH-613	Naval Ships' Technical Manual, Chapter 613, Wire and Fiber Rope and Rigging	Section 1	Note 1
	S9086-S3-STM-010/CH-555	Naval Ships' Technical	Sections 2 & 3	Note 1

Rating	Short Title	Long Title	Chapters/ Paragraphs	Stocking Point
		Manual, Chapter 555, Volume 1 Surface Ship Firefighting		
	VLASB-8-R-K	Visual Landing Aids General Service Bulletin No. 8, Revision K	Paragraphs 1 & 2	Note 1
	OPNAVINST 4660.3	Department of Navy Air Terminal Procedures	Chapters 1, 2, 3, 4, 5, 6, & 7	Note 4
	NWP 3-04.1	Helicopter Operating Procedures for Air Capable Ships	Chapters 7 & 8	Notes 1 & 2
	NWP 4-01.4	Underway Replenishment	Chapter 10	Notes 1 & 2
	NAVEDTRA 12368	Aviation Boatswain's Mate H 3 & 2	Chapters 2, 3, 4, 5, 8, & 9	Note 1
	COMNAVAIRPAC/AIRLAN TINST 3100.4	Air Department Standard Operating Procedures (SOP)	Chapters 1, 2, 3, 4, 5, 6, 7, 10, 13, 14, & 16	Note 3
	NAEC-ENG-7576	Shipboard Aviation Facilities Resume	Appendices A, B, C, & D	Note 1
	NAEC-ENG-7604	Maximum Density Aircraft Spotting, CV/CVN and LHA/LHD Class Ships	Tables 1, 2, 3, 4, 5, 6, 7, & 8	Note 1

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